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The Use of Prescribed Burns to Manage and Sustain Natural Plant Communities in North Carolina and the Southeast

Lucas C. Risinger

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Dr. Michael J. Baranski, Instructor

Ms. Haley King, Assistant

Summer Ventures in Science and Mathematics

University of North Carolina at Charlotte

Abstract

Prescribed burning, a method used for centuries by foresters and farmers alike, utilizes safe and controlled fires in order to preserve natural ecosystems. Fire has gone through severe criticism by both governments and people, and it can be safely employed in ecosystems that desperately need fire to maintain order, despite humanity's general hate for the dangerous and unpredictable element. Fire dependent ecosystems are constantly under attack by nonnative species that will expeditiously take over and dominate forests; without fire, the entire ecosystem - plants and wildlife - is forced into an unstable state, putting entire species in danger. In this study, the southeast United States' longleaf pine wiregrass ecosystems were studied with the relationship between prescribed fire presence and frequency and the state of the ecosystem in mind. After analyzing data collected from previous studies, it was found that prescribed fires are effective in keeping treated ecosystems in a natural state - preventing the growth and eventual domination of non native species while preserving native species.